PATENT

Application No. 09/868,379 Filing Date: 08/15/2001 Examiner: Frederick F. Krass

Art Unit: 1614

Attorney Docket No.219-06/H03763

II. <u>Amendment</u>

Applicants amend claims 8–9 and 13–14 and cancel claims 11–12 and 18–19, as set forth below in a listing of all of the claims in the application, with the status of each claim noted parenthetically, in accordance with 37 C.F.R. §1.121. This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

Claims 1-7. canceled.

Claim 8.

(currently amended) A suspension of one or more phosphate calcium salts, fluoride calcium salts, or fluorophosphate calcium salts in a liquid medium in which the salts are less than 1 g/l soluble, wherein the calcium salts comprise primary particles having diameters of from 5 to 50 nanometers and lengths of from 10 to 150 nanometers, stabilized against agglomeration by a content of at least 0.01% by weight, based on the weight of the suspension, of a water-soluble surfactant or of a natural water-soluble polymeric protective colloid selected from the group consisting of gelatin, casein, albumin, starch, plant gums, water-soluble derivatives of water-insoluble natural polymeric substances, cellulose ethers, methylcellulose, hydroxyethylcellulose, carboxymethylcellulose, hydroxethylstarch and hydroxypropylguar, adsorbed onto said particles.

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Claim 9.

(currently amended) A suspension comprising 1% to 40% by weight of one or more phosphate calcium salts, fluoride calcium salts or fluorophosphate calcium salts in a liquid medium in which the salts are less than 1 g/l soluble, wherein the calcium salts comprise primary particles having diameters of from 5 to 50 nanometers and lengths of from 10 to 150 nanometers, said particles stabilized against agglomeration by a content of 0.1% to 10% by weight, based on the weight of the one or more calcium salts, of a water-soluble surfactant or a natural water-soluble polymeric protective colloid selected from the group consisting of gelatin, casein, albumin, starch, plant gums, water-soluble derivatives of waterinsoluble natural polymeric substances, cellulose ethers, methylcellulose, hydroxyethylcellulose. carboxymethylcellulose, hydroxethylstarch and hydroxpropylguar, adsorbed onto said particles.

Claim 10.

(previously presented) The suspension of claim 9, wherein the water-soluble surfactant comprises one or more non-ionic surfactants, the suspension comprising 1% to 10% by weight, based on the weight of the one or more calcium salts, of the one or more nonionic surfactants.

Claims 11-12. (canceled)

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Claim 13. (currently amended) A toothpaste comprising one or more silica polishing agents, humectants, binders or aromas and 0.1–5% by weight of one or more calcium salts selected from the group consisting of amorphous calcium phosphate, hydroxylapatite, fluoroapatite, and calcium fluoride, said calcium salts being present in the form of a suspension of one or more of the salts in a liquid medium in which the salts are less than 1 g/l soluble, wherein the salts comprise primary particles having diameters of from 5 to 50 nanometers and lengths of from 10 to 150 nanometers, stabilized against agglomeration by a content of at least 0.01% by weight, based on the weight of the suspension, of a water-soluble surfactant or of a natural water-soluble polymeric protective colloid selected from the group consisting of gelatin, casein, albumin, starch, plant gums, water-soluble derivatives of water-insoluble natural polymeric substances,

cellulose ethers, methylcellulose, hydroxyethylcellulose, carboxymethylcellulose,

hydroxethylstarch and hydroxpropylguar adsorbed onto said particles.

Claim 14. (currently amended) A method of remineralizing teeth comprising the steps of applying to a tooth a remineralizing-effective amount of a suspension of one or more phosphate calcium salts, fluoride calcium salts, or fluorophosphate calcium salts in a liquid medium in which these salts are less than 1 g/l soluble, wherein the calcium salts comprise primary particles having diameters of from 5 to 50 nanometers and lengths of from 10 to 150 nanometers, stabilized against agglomeration by a content of at least 0.01% by weight, based on the weight of the suspension, of a water-soluble surfactant or of a natural water-soluble protective colloid selected from the group consisting of gelatin, casein, albumin, starch, plant gums, water-soluble derivatives of water-insoluble natural polymeric substances, cellulose ethers, methylcellulose, hydroxyethylcellulose, carboxymethylcellulose, hydroxethylstarch and hydroxpropylguar adsorbed onto said particles.

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Claim 15. (previously presented) A suspension of one or more phosphate calcium salts, fluoride calcium salts, or fluorophosphate calcium salts in a liquid medium according to claim 8, in which the salts are less than 1 g/l soluble, wherein the calcium salts comprise primary particles having diameters of from 5 to 50 nanometers and lengths of from 10 to 150 nanometers, stabilized against agglomeration by a content of at least 0.01% by weight, based on the weight of the suspension, of a water-soluble surfactant or of a water-soluble gelatin adsorbed onto said particles.

Claim 16. (previously presented) A suspension according to claim 9, comprising 1% to 40% by weight of one or more phosphate calcium salts, fluoride calcium salts or fluorophosphate calcium salts in a liquid medium in which the salts are less than 1 g/l soluble, wherein the calcium salts comprise primary particles having diameters of from 5 to 50 nanometers and lengths of from 10 to 150 nanometers, said particles stabilized against agglomeration by a content of 0.1% to 10% by weight, based on the weight of the one or more calcium salts, of a water-soluble surfactant or a water-soluble gelatin adsorbed onto said particles.

Claim 17. (previously presented) The suspension of claim 16, wherein the water-soluble surfactant comprises one or more non-ionic surfactants, the suspension comprising 1% to 10% by weight, based on the weight of the one or more calcium salts, of the one or more nonionic surfactants.

Claims 18-19. (canceled)

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Claim 20.

(previously presented) A toothpaste according to claim 13, comprising one or more silica polishing agents, humectants, binders or aromas and 0.1–5% by weight of one or more calcium salts selected from the group consisting of amorphous calcium phosphate, hydroxylapatite, fluoroapatite, and calcium fluoride, said calcium salts being present in the form of a suspension of one or more of the salts in a liquid medium in which the salts are less than 1 g/l soluble, wherein the salts comprise primary particles having diameters of from 5 to 50 nanometers and lengths of from 10 to 150 nanometers, stabilized against agglomeration by a content of at least 0.01% by weight, based on the weight of the suspension, of a water-soluble surfactant or of a water-soluble gelatin adsorbed onto said particles.

Claim 21.

(previously presented) A method of remineralizing teeth according to claim 14, comprising the steps of applying to a tooth a remineralizing-effective amount of a suspension of one or more phosphate calcium salts, fluoride calcium salts, or fluorophosphate calcium salts in a liquid medium in which these salts are less than 1 g/l soluble, wherein the calcium salts comprise primary particles having diameters of from 5 to 50 nanometers and lengths of from 10 to 150 nanometers, stabilized against agglomeration by a content of at least 0.01% by weight, based on the weight of the suspension, of a water-soluble surfactant or of a water-soluble gelatin adsorbed onto said particles.